

Introduction: We sought to characterize the management of uncomplicated subcutaneous abscesses (SA) by Canadian emergency physicians (EPs). **Methods:** Cross-sectional study of CAEP membership. Subjects were emailed an invitation to an online survey, and two biweekly reminders. Wilcoxon rank sum test was used for association with age, and Chi Square and Fishers exact test were used for binary variables. **Results:** Response rate was 21.2 % (392 Responses/1850 surveyed). Duration of practice ranged from 30.2 % practising ≤ 5 years, to 25.7% practising ≥ 20 years. Teaching setting was described in 89.1% of responses. Irrigation with saline is performed by 57.1 % of EPs, tap water 2.1 %, or disinfectant 2.1% of EPs, with 39.1% not doing any irrigation. Approximately half (49.2%) typically do not pack or close wounds, while 40.6 % employ ribbon or gauze packing, and 1.6 % primary closure. Antibiotics are generally not prescribed by 16.8%. EPs prescribe antibiotics when suspecting surrounding cellulitis (84.2%), immunocompromised host (51.6%), MRSA (28.9%), or recurrence within 30 days (27.5 %). Cultures are taken almost always by 28.2%, half the time or less by 33.9%, never by 11.6%, and if MRSA is suspected by 33.9%. Follow-up instructions are with FP (56.7%), ED at 24 hours (5.91 %) or 48 hours (17.74 %), or not required (24.7%). Most EPs (90.9%) report having no standardized protocol for abscess management in their ED. EPs with fewer years in practice are more likely to make cruciate incisions ($p=0.009$), to generally not irrigate incisions ($p=0.02$), to culture if MRSA is suspected ($p=0.02$), and to prescribe antibiotics when suspecting MRSA ($p=0.02$) immune-compromised host ($p=0.03$), and in case of spontaneous treatment failure or recurrence ($p=0.0004$). EPs with more years in practice are more likely to pack with ribbon gauze ($p=0.06$), and to almost always swab for C&S ($p=0.04$) **Conclusion:** Practice variability and deviations from practice guidelines (i.e. IDSA, Choosing Wisely Canada) are noted. A knowledge translation exercise based on the guidelines for Canadian EPs would be useful.

Keywords: abscess, incision, methicillin-resistant staphylococcus aureus

P052

Utility of data captured by transition referral forms for program evaluation and research

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Introduction: Increase in functional decline of older adults after discharge from the emergency department (ED) has been reported; however, evaluations of interventions to mitigate this problem are infrequent. Data collected in the ED on older adults may document functional status, yet their utility for research is unknown. This study aimed to assess the usability of data collected by ED Transition Coordinators (EDTC) during routine assessments for functional decline research. **Methods:** EDTCs assess all patients 75 years old presenting to the ED and complete a standardized Transitional Assessment Referral (TAR) form that documents patients independence and daily functioning. To measure the utility of these forms for research purposes, trained research staff evaluated the TARs completed in April 2017 by TCs in the University of Alberta Hospital ED by extracting data from the TARs into a purpose-built REDCap database. Researchers selected and assessed for completeness and clarity the following variables unique to the TARs: facility vs. non-facility living, goals of care and personal directive, fall history, falls in the past 90 days, independence in 14 activities of daily living (ADLs)/instrumental activities of daily living

(IADLS), community services in place, and homecare referrals for discharged patients. The proportion of TARs with data for each variable and the proportion of forms with unambiguous responses in each section are reported. **Results:** Overall, 500 forms were analysed; patients were 41% male with a mean age of 82 (SD=11.2). Homecare referrals, facility vs. non-facility living, and independence with 14 ADLs/IADLs were the most frequently documented variables (81%, 78%, and 79%, respectively); however for ADLs/IADLs, 59% of the 79% had one or more missing components. While fall history was reported in 301 forms (60%), only 107/301 (36%) reported the number of falls in the last 90 days. The referral to homecare variable was complete in 217/268 (81%) forms; however, 99% of files were missing data about goals of care, personal directives, and receipt of community services. **Conclusion:** Although some information on elderly patients is consistently reported, many of the social service/human factors associated with functional decline are not recorded. While data on the TARs may be useful for studying functional decline in the ED, exploring the barriers to form completion may improve adherence thereby increasing their research utility.

Keywords: transitions in care, elderly, secondary data usage

P053

Characteristics and outcomes of patients seen by transition coordinators in the emergency department

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Introduction: Emergency Department (ED) Transition Coordinators (TC) have been introduced to many EDs. In Alberta, the EDTC role was designed to evaluate the home needs of senior patients (75 years of age) to enable safe return home after an ED visit, thereby mitigating admissions and return ED visits. The effectiveness of this role at achieving its objectives has received limited evaluation. **Methods:** TCs assess all ED patients 75 years old, and physicians request TC assessment for patients <75 years. The TC assessment includes completing a Transitional Assessment Referral (TAR) form that collects information on comorbidities, living arrangements, connections to community and homecare services, independence in activities of daily living (ADLs), and referrals, and disposition. Trained research staff extracted data from consecutive TARs for patients presenting during April 2017 into a REDCap database. The proportions of patients seen by TCs who were admitted, had an unplanned return to the ED within the study period, or received a new homecare referral were assessed. Categorical variables are reported as proportions; continuous variables are reported as mean and standard deviation (SD) or median and interquartile range (IQR), as appropriate. **Results:** In April 2017, there were 9849 visits to the ED; of these, TCs assessed 478 patients during 500 visits. The mean age was 82 (SD=11.2) and 41% were male; 22 patients presented twice during April 2017. Patients had a median of 2 (IQR: 1, 5) co-morbidities and 40 (8%) patients reported falls in the past 90 days (median = 1; IQR: 1, 2). Overall, 144 (29%) patients lived in a care facility, while 204 (41%) lived at home; residence was unclear or not documented for 152 (30%). Patients reported being independent in a median of 9/14 (IQR: 3, 13) ADLs. An existing homecare connection or receipt of homecare services was documented for 185 patients (37%). Finally, 59 (12%) visits included a new or updated homecare referral, while 200 (33%) ED visits ended in admission. **Conclusion:** Elderly patients seen in the ED assessed by EDTCs are complex, and despite being well connected, they frequently need hospitalization. In a small proportion of cases,

additional or new home care resources are required prior to ED discharge; however, few patients returned to the same ED during the one month study period. Given the high proportion of patients assessed, further evaluation of outcomes is warranted.

Keywords: transitions in care, elderly

P054

Interventions aimed at improvement in emergency department related transitions in care for adult patients with atrial fibrillation and flutter: a systematic review

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Introduction: Introduction: Transitions in care (TiC) interventions have been proposed to improve the management and outcomes of patients in emergency departments (ED). The objective of this review was to examine the effectiveness of ED-based TiC interventions to improve outcomes for adult patients presenting to an ED with acute atrial fibrillation or flutter (AFF). **Methods:** Methods: A comprehensive search of eight electronic databases and various grey literature sources was conducted. Comparative studies assessing the effectiveness of interventions to improve TiC for patients presenting to the ED with acute AFF were eligible. Two independent reviewers completed study selection, quality assessment, and data extraction. When applicable, relative risks (RR) with 95% confidence intervals (CIs) were calculated using a random effects model and heterogeneity was reported among studies using I-square (I²) statistics. **Results:** Results: From 744 citations, seven studies were included, consisting of three randomized controlled trials (RCT), three before-after (B/A) studies, and one cohort study. Study quality ranged from unclear to low for the RCTs according to the risk of bias tool, moderate in the BA trials according to the BA quality assessment tool, and high quality of the cohort study according to the Newcastle Ottawa scale. The majority of interventions were set within-ED (n=5), including three clinical pathways/management guidelines and two within-ED observation units. Post-ED interventions (n=2) included patient education and general practitioner referral. Four studies reported a decreased overall hospital length of stay (LoS) for AFF patients undergoing TiC interventions compared to control, ranging from 26.4 to 53 hours; however, incomplete and non-standardized outcome reporting precluded meta-analysis. An increase in conversion to normal sinus rhythm among TiC intervention patients was noted, which may be related to increased utilization of electrical cardioversion among the RCTs (RR=2.16; 95% CI: 1.42, 3.30; I²=%), B/A studies (RR=2.69, 95% CI: 2.17, 3.33), and cohort study (RR=1.39; 95% CI: 1.24, 1.56). **Conclusion:** Conclusions: Within-ED TiC interventions may reduce hospital LoS and increase use of electrical cardioversion. However, no clear recommendations to implement such interventions in EDs can be generated from this systematic review and more efforts are required to improve TiC for patients with AFF.

Keywords: atrial fibrillation, transitions in care

P055

An international, interprofessional investigation of the podcast listening habits of emergency clinicians: a METRIQ study

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Introduction: Emergency medicine clinicians (physicians, nurses, paramedics, physician assistants) utilize podcasts for learning. However,

their versatility produces variability in the ways they are used (e.g. their speed can be increased or decreased, unrelated activities can be performed simultaneously, or they can be accompanied by active learning methods). This study investigated how and why podcasts are used by an international cohort of clinicians. **Methods:** An international sample of medical students, residents, physicians, nurses, physician assistants, and paramedics was recruited to complete a survey hosted on FluidSurveys software using social media (Twitter and Facebook), direct contact from our international authorship group, infographics, and a study website (<https://METRIQstudy.org/>). Participants who indicated interest in the study were sent an email containing the study survey. Reminder emails were sent every 5-10 days a maximum of three times. **Results:** 462 clinicians expressed interest and 397 completed the survey (86.0% completion rate). Participants hailed from 34 countries (38.8% Canada, 30% United States, 31.2% outside of North America) and a majority (61.9%) were physicians. Approximately half (45.8%) of the participants listened to podcasts weekly. Podcasts were used to learn core material (75.1%), refresh memory (72.3%), or review new literature (75.8%). Most listened on iPhones (61%) and the native Apple App (66.1%). The preferred Android apps were Pocket Casts (22.8%) and Google Play (18.5%). Many listened to podcasts while driving (72.3%). Active learning techniques such as pausing, repeating segments, taking notes, or listening to a podcast more than once were rarely used (1/4 of the time or less) by the majority of participants. **Conclusion:** This study describes how and why medical education podcasts are used by emergency medicine clinicians and should inform both podcast producers and future research investigating the impact of various listening habits on retention. Further analysis of the data will elucidate differences in listening habits.

Keywords: podcasts, online educational resources, medical education

P056

Non-invasive measurement of the central venous pressure using near-infrared spectroscopy versus point-of-care ultrasound

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Introduction: A fundamental hemodynamic parameter, the central venous pressure (CVP) is rarely available in the emergency patient due to the delay and risks inherent to central vein cannulation. Recently, two non-invasive strategies have emerged: a) point-of-care ultrasound to supplement traditional inspection of the internal jugular waveform; or b) near-infrared spectroscopy (NIRS) of the external jugular vein. **Methods:** Five medical students underwent standardized training on both NIRS device (Venus 2000 CVP; Mespere Life Sciences, Waterloo ON) and ultrasound-assisted CVP assessment. During prescheduled, randomly permuted and balanced shifts, a pair of students obtained blinded independent measurements using each device within 10 minutes of each other. High priority subjects likely to have abnormal CVP (e.g. vomiting, dehydrated, heart failure, sepsis) were approached preferentially, followed by a convenience sample of other eligible patients in the emergency department. Secondary outcomes were stopwatch-recorded time from device ready to stable measurement, as well as operator ease, operator confidence and patient discomfort. The blinded treating physician rated each subject's volume status on an ordered scale: depleted, neutral and overloaded. **Results:** We enrolled 104 patients (median [IQR] age 68 [53, 78] years; 50% male; BMI 27.6 [17.0, 47.7] kg/m²; admission rate 27%) in June-August 2017. Treating physicians classified 17 as volume depleted and 12 overloaded. CVP measurements differed widely between techniques: ultrasound 8 [7, 9] cmH₂O (3 cases